CLAIMS

What is claimed is:

1. A method of operating a head over a disk, comprising:

operating the head at a first height over a data zone of the disk with respect to a data zone surface during at least one of a read operation and a write operation;

parking the head at a second height with respect to the data zone surface; and

operating the head at a third height, with respect to the data zone surface, over a transition zone of the disk while transitioning the head to park, wherein the third height is greater than the first height.

2. The method of claim 1, wherein the third height is at least as high as the second height.

3. The method of claim 1, further comprising:

operating the head at first height range over the data zone; and

operating the head at a third height range over the transition zone of the disk, wherein a portion of the third height range is greater than the first height range.

4. The method of claim 3, wherein a lower side of the first height range is approximately zero.

5. The method of claim 1, wherein the head is coupled to a slider and the slider is coupled to a suspension arm and wherein parking the head comprises parking the suspension arm on a ramp.

6. The method of claim 5, wherein the ramp is disposed over a landing zone.

7. The method of claim 1, wherein the head is coupled to a slider and wherein parking the head comprises parking the slider on a landing zone.

8. The method of claim 7, wherein landing zone is a contact start-stop zone.

9. The method of claim 7 wherein the landing zone includes laser texture bumps having a surface height.

10. The method of claim 9, wherein operating the head at the third height comprises clearing the surface height of the laser texture bumps in the contact start-stop zone.

11. The method of claim 1, wherein the head is coupled to a slider and wherein operating the head at the third height comprises increasing air pressure between the slider and the disk using a surface feature of the transition zone.

12. The method of claim 1, wherein the data zone includes a discrete track recording (DTR) patterned surface and the transition zone has a planar surface relative to the DTR patterned surface.

13. The method of claim 12, wherein the planar surface is substantially smooth.

14. The method of claim 12, wherein the planar surface has a texture.

15. The method of claim 12, wherein the planar surface of the transition zone has a texture produced through the deposition of a plurality of layers of the disk above a textured layer.

16. The method of claim 15, wherein the textured layer is a textured substrate.

17. The method of claim 15, wherein the textured layer is a textured NiP layer.

18. The method of claim 1, wherein the first fly height is approximately zero.

19. The method of claim 1, wherein the operating of the head at the first height is over a data zone.

20. The method of claim 1, wherein the operating of the head at the third height is over a non-data zone and a non-landing zone.

21. The method of claim 1, wherein the third height is generated using a surface topology of the transition zone.

22. The method of claim 21, wherein the surface topology is substantially smooth.

23. The method of claim 8, wherein the head is coupled to a slider, and wherein the method further comprises reducing stiction between the slider and the contact-start-stop zone.

24. A magnetic recording disk, comprising:

a data zone to store data, the data zone having a discrete track recording pattern;

a CSS zone having a plurality of laser texture bumps; and

a transition zone having a planar surface relative to the discrete track recording pattern of the data zone.

25. The magnetic recording disk of claim 24, wherein the data zone comprises a discrete bit recording pattern.

26. The magnetic recording disk of claim 24, wherein the planar surface of the transition zone is substantially smooth relative to the plurality of laser texture bumps of the CSS zone.

27. The magnetic recording disk of claim 24, wherein the planar surface has a texture.

28. The magnetic recording disk of claim 24, wherein the planar surface of the transition zone has a texture produced through the deposition of a plurality of layers of the disk above a textured layer.

29. The magnetic recording disk of claim 28, wherein the textured layer is a textured substrate.

30. The magnetic recording disk of claim 29, wherein the textured layer is a textured NiP layer.

31. A magnetic recording disk, comprising:

a first zone to store data;

a second zone adjacent to the first zone, the second zone having a surface to increase a fly height of a head greater than when the head is operating over the first zone; and

a third zone adjacent to the second zone in which to park the head thereabove.

32. The magnetic recording disk of claim 31, wherein the third zone is a contact-start-stop zone.

33. The magnetic recording disk of claim 31, wherein the third zone is a load/unload zone.

34. The magnetic recording disk of claim 31, wherein the first zone comprises a discrete track recording (DTR) pattern.

35. The magnetic recording disk of claim 34, wherein the second zone has a planar surface relative to the DTR patterned surface of the first zone.

36. The magnetic recording disk of claim 35, wherein the planar surface of the second zone is substantially smooth.

37. The magnetic recording disk of claim 35, wherein the planar surface has a texture.

38. The magnetic recording disk of claim 35, wherein the planar surface of the transition zone has a texture produced through the deposition of a plurality of layers of the disk above a textured layer.

40. The magnetic recording disk of claim 38, wherein the textured layer is a textured substrate.

41. The magnetic recording disk of claim 38, wherein the textured layer is textured NiP layer.

42. A magnetic recording disk, comprising:

a first zone to store data;

a second zone adjacent to the first zone, the second zone comprising means to increase a fly height of a head greater than when the head is operating over the first zone; and

a third zone adjacent to the second zone in which to park the head thereabove.

43. A disk drive, comprising:

a slider comprising a Hall effect head or a head having a magneto-resistance read element; and

a magnetic recording disk comprising:

a first zone to store data;

a second zone adjacent to the first zone, the second zone having a surface to increase a fly height of the slider greater than when the slider is operated over the first zone; and

a third zone adjacent to the second zone in which to park the slider thereabove.

44. The disk drive of claim 43, wherein the third zone is a contact-start-stop zone.

45. The disk drive of claim 43, wherein the third zone is a load/unload zone and wherein the slider is coupled to a suspension arm, the suspension arm configured to park the slider above the load/unload zone when the slider resides on a ramp.

46. The disk drive of claim 43, wherein the first zone comprises a discrete track recording pattern.

47. The disk drive of claim 46, wherein the second zone has a planar surface relative to the discrete track recording pattern of the first zone.

48. The disk drive of claim 43, wherein the third zone is a CSS zone.

49. The disk drive of claim 48, wherein the CSS zone has a plurality of laser induced bumps.

50. The disk drive of claim 49, wherein the planar surface of the second zone is substantially smooth relative to the plurality of laser texture bumps of the CSS zone.

51. The disk drive of claim 49, wherein the planar surface has a texture.

52. The disk drive of claim 47, wherein the planar surface of the second zone has a texture produced through the deposition of a plurality of layers of the disk above a textured layer.

53. The disk drive of claim 52, wherein the textured layer is a textured substrate.

54. The disk drive of claim 52, wherein the textured layer is a textured NiP layer.

55. The disk drive of claim 43, wherein the slider comprises at least one protrusion on the slider to reduce stiction between the slider and the third zone.

56. The disk drive of claim 43, wherein the slider further comprises a body having a first width and an air bearing having a second width, wherein the second

zone has a third width being wider than the second width of the air bearing and narrower than the first width of the slider body.

57. The disk drive of claim 43, wherein the head has a giant magneto-resistance read element.

58. A load/unload disk drive, comprising:

a slider comprising a Hall effect head or a head having a magneto-resistance read element;

a ramp; and

a magnetic recording disk, wherein the ramp is disposed above a first portion of the magnetic recording disk, and wherein the magnetic recording disk comprises:

a data zone having a discrete track recording pattern; and

a load/unload zone adjacent to the data zone, wherein the load/unload zone includes the first portion residing beneath the ramp and a second portion extending beyond the ramp, the second portion of the load/unload zone having a surface to increase a fly height of a slider greater than when the slider is operating over the data zone.

59. The load/unload disk drive of claim 58, wherein the second portion of the load/unload zone has a planar surface relative to the discrete track recording pattern of the data zone.

60. The load/unload disk drive of claim 59, wherein the planar surface of the load/unload zone is substantially smooth.

61. The load/unload disk drive of claim 59, wherein the planar surface has a texture.

62. The load/unload disk drive of claim 59, wherein the planar surface of the load/unload zone has a texture produced through the deposition of a plurality of layers of the magnetic recording disk above a textured layer.

63. The load/unload disk drive of claim 62, wherein the textured layer is a textured substrate.

64. The load/unload disk drive of claim 62, wherein the textured layer is a textured NiP layer.